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Guide to Pansy Culture

and
CATALOGUE
of

**PREMIUM
AMERICAN
PANSY
SEEDS**

GROWN BY
WILLIAM TOOLE
Pansy Specialist
BARABOO, WIS.

New Century Greeting.

We all rejoice that our nation begins the new century under such auspicious circumstances.

We believe that ours, as a nation of progress, leads the world to-day. In a line with the spirit of the times we feel that our Premium American Pansy Seeds and Plants continue to hold a foremost position. We expect to continue to hold the good will and patronage of our old customers and ask others to give our seeds and plants a trial. It is to our interest to please our customers.

As in the past we thank our customers for recommending new patrons to us.

Wishing you all a Happy New Year, we ask a continuance of your patronage and good will.

**WILLIAM TOOLE, Pansy Specialist,
Baraboo, Wis.**

January 1, 1901.

How to Grow Pansies.

WHEN TO SOW PANSY SEEDS.

From southern Illinois northward, if but one sowing is made, most satisfaction may be derived from planting out of doors early in spring. These plants will bloom from midsummer until snow flies and if properly cared for, give the earliest flowers in spring and an abundance of bloom until summer heat has drawn the branches out so long that they had better give way to younger plants.

South of the latitude above mentioned, it is better to depend on spring flowers from plants started in late summer and early fall, or from seeds planted in the greenhouse or house in January.

Pansies commence to flower in from seventy to eighty days from the time of sowing, under reasonably favorable conditions, and my customers in the extreme south and on the Pacific coast, will thus see that with fall sowing they may have a long period of flowering before summer heat commences.

In the latitude of northern Illinois and Wisconsin, seeds for plants to winter over should not be planted later than first of September. If plants are desired for winter blooming, sow late in July. Flowers can be had nearly as early from plants started in the greenhouse from middle of January to middle of February but in the house it would be better not to plant earlier than March, for it is necessary to give the young plants room as they grow, planting out in shallow boxes before they become drawn and slender. If seeds are sown out of doors just before winter sets in, they will come up early in spring and be in flower before July.

SOWING SEEDS.

The same care is required in sowing pansies as for other small seeds. They must not be covered too deeply, nor be permitted to dry after they have commenced to germinate, for a dried plant is dead no matter how small it is.

Pansy seed should be sown thinly in shallow furrows not more than one-sixteenth of an inch deep, made with the sharpened edge of a piece of lath. The seed-bed should be mellow and rich, leveled smooth before the seeds are sown, and after sowing the seeds should be covered evenly, and the surface pressed with a piece of board. The seed-bed should be watered and shaded until the young plants are up, after which they should be gradually accustomed to full light. Shade for the seed-bed may be secured by laying over some kind of frame about a foot from the ground, laths or pieces of sheeting.

As soon as the plants are up the shading must be gradually removed as there is always danger of "damping off" with any kind of small plants in close, warm and damp situations. Too high temperature in the seed-bed is fatal to pansy seeds, and those planted in midsummer will not germinate strongly if the thermometer in the shade ranges for a long time above 75 degrees. If the seeds are permitted to dry after they have sprouted, their vitality is gone. If covered too deeply they cannot come up.

WHERE TO GROW PANSIES.

In the house or greenhouse in winter, if young plants are had just commencing to flower late in the fall, if they are not kept too hot and dry and are protected from green fly and red spider. Old plants which have done service in the garden are not suitable for winter blooming. Several plants in a box are better than if grown in earthen pots. On the balcony, porch or window sill in summer, if not directly facing the south. Grown in this way no plant better repays the care given. In the garden anywhere, if not in too hot a place, directly facing the south; nor where they must struggle with larger plants and trees for nourishment.

GENERAL MANAGEMENT.

The plants which have flowered in the spring will do well again in the fall if the long branches are cut back late in June.

The ability of the pansy to stand hot weather depends greatly on its treatment. If the soil is rich enough, and not too dry, nor in too hot a situation, pansies, with frequent cultivation, will stand a long siege of hot weather, if no seeds are allowed to form. With this care one can have pansies from young plants in midsummer. A rich, sandy loam is best for pansies, and if not too stiff, a clay soil is better than that which is very sandy. But whatever its texture, the soil should be made rich with well-rotted manure, thoroughly incorporated with the soil, and stirred several times while the plants are in the seed-bed. This thorough preparation of the soil before transplanting is very important.

Well-rotted manure, if to be had, is preferable to commercial fertilizers.

Transplant after the plants have attained the fourth or fifth leaf and before they have become drawn and slender with crowding. An eastern and northern slope is preferable. My own experience does not permit me to favor shade, although shade is preferable to too much heat, and the shade of trees is more objectionable than shade of buildings. Temporary shade during the hottest portion of the day in extremely warm weather would be an advantage, but shade the whole season through will not admit the brightest colors, or an abundance of flowers.

If watering is necessary and possible the ground should be well soaked in the evening and thoroughly stirred, about two inches deep, next morning, as soon as the soil is dry enough.

Cultivation without watering, is better than watering without cultivation.

Keep the buds picked off after transplanting until the plants are well established, and also during very hot weather, for a good display of flowers in the fall.

When growing where they are to stay, about eight inches to a foot square of space should be allowed each plant. Frequent stirring of the soil is necessary between the plants until they are too large.

A crust should never be permitted to form on the surface. Frequent cultivation is, more than anything else, the secret of success in pansy growing.

WINTER PROTECTION.

The plants which have flowered through the summer and fall will usually winter over well if protected with a light covering of leaves or straw, which is better if a little brush has been placed over the plants first.

Young plants are quite hardy if protected from sharp winds, and not allowed to become too wet near the surface of the ground. The young plants should be transplanted from the seed-bed to winter quarters early enough to become well rooted before winter sets in.

Boards may be used instead of glass for cold frame covering; glass should be shaded if too warm, as it is desirable to keep the plants dormant, and they should be watered, if necessary, as the roots will sometimes freeze dry if not looked after.

A good way to protect pansy and other plants is to have a V trough of narrow boards to cover the plants with, and then throw on some coarse litter of leaves, straw, manure or shavings. In all cases thorough surface drainage must be provided to prevent water from accumulating about the plants and forming ice about them.

PANSY PESTS.

Pansies, like many other flower plants, in hot, dry weather, are liable to be injured by the so-called "Red Spider," a minute insect which attacks the under surface of the leaves of many garden and field plants, causing them to wither, as if from dryness. Spraying of water from a

garden pump directed forcibly against the plants will reach the under side of the leaves and destroy the insects. The addition of pyrethrum powder or else kerosene emulsion to the water makes the remedy still more effective.

As the red spider flourishes best in a dry atmosphere, it is often the case that plants in the shade of trees suffer because heavy dews are kept from the plants by the trees. Aphis or plant lice cause more injury in gardens than people are generally aware of. Apply, in any way to wet the plant lice, a solution of one teaspoon of nicotine two quarts of water. The same may be used on house or other plants troubled with scale or shell louse, mealy bug or red spider. Also for vermin in the hen house or on animals.

VARIETIES OF PANSY SEEDS AND PRICES.

In the following list I continue the simple classification heretofore followed, which is briefly descriptive of kinds. Some kinds are so nearly like others it seems scarcely worth while to list them separately.

Our old customers each year recognize increased and changing variety in the markings. With careful selection and persistent rejection of anything not up to our standard of excellence we attain to the highest grade in quality. No variety of flower responds more readily to good care than does the pansy, and none are more sensitive to neglect or careless treatment. For that reason it is possible for the best strain of seed to not show its full beauty because not given a chance.

Please give ours a chance to show what they can do.

Notice—A uniform price of ten cents per package is made for the following varieties as further noted.

No.

- 1 Deep Blue—varying from bright to very dark blue.
- 2 Blue Black Shaded—black in center, changing outward to shades of blue.
- 3 Light Blue—delicate shades of light blue or lavender.
- 4 Nos. 1, 2 and 3 mixed.
- 5 Uncle Tom—my own strain—the deepest black of pansies.
- 6 Black—violet center.
- 7 Black—bronze center.
- 8 Nos. 5, 6 and 7 mixed.
- 9 Havana Brown—attractive shades of light brown, old gold, etc.
- 10 Velvet Brown—very rich and velvet dark brown shades.
- 11 Brown and Bronze—dark mahogany shades with brown center.
- 12 Bronze—varying from light bronze to copper hue.
- 13 Nos. 9, 10, 11 and 12 with other shades of brown; mixed.
- 14 Fancy Red—reddish shades of purple from rosy to almost crimson.
This variety, originating with myself, is in all respects the best red pansy.
- 15 Rose—a new variety of my own and quite distinct from any other, with light shades of pink to deep rose, and carmine purple, with rich velvety centers.
- 17 Cardinal—called scarlet by some contains pleasing combinations of red and yellow more nearly approaching scarlet than any other pansy.
- 19 Purple Mantle—deep maroon to reddish shades of purple with light tinge near the edge of petals.
- 20 Velvet Purple—rich, dark shades of royal and violet purple.
- 21 Nos. 14 to 20 mixed.
Marbled—beautiful combinations of colors on white or yellow ground.
- 22 Marbled White Ground.
- 23 Marbled Yellow Ground.
- 24 Marbled colored, upper petals edged with white, lower petals marked with yellow.

- 25 Marbled dark.
- 26 Marbled mixed.
- 28 Fiery Purple—velvety scarlet purple shades.
- 29 Fire King—after style of preceding, with more yellow.
- 30 Mixture—22 to 29 inclusive.
- 31 Rosy Lilac—flowers varying from pale lilac to darker shades.
- 32 Striped Bronzed Ground.
- 33 Striped Lilac Ground.
- 34 Striped Mixed—flowers beautifully and curiously marked, with lilac bronze and yellow on purple.
- 35 Nos. 31 to 33 mixed.
- 36 Snow Queen—pure white with characteristic yellow dot in center of flower, sometimes marked near center with faint blue or purple lines.
- 37 White Penciled—much like Snow Queen with blue or purple lines near center of flowers.
- 38 White, Large Center.
- 39 White, Blue Edge.
- 40 Nos. 36 to 39 inclusive, mixed.
 Odier or Five Spotted—While other pansies have center markings only on three lower petals these marks are shown on all petals in this variety.
- 44 Odier mixed.
 Large Spotted—very large, rich center marking in great variety.
- 45 Large Spotted White Ground.
- 46 Large Spotted Yellow Ground.
- 47 Large Spotted Red Ground.
- 48 Large Spotted Mixed.
- 49 Cassier or Giant Odier—More after style of Large Spotted than Odier, but an interesting new variety.
- 50 Mixture of Odier, Large Spotted and Cassier.
- 51 Emperor William—blue with large dark center.
- 52 Lord Beaconsfield—dark purple, shading to lavender.
- 53 Wm. Penn—a new variety, light drab, shading to brown or pearly gray.
- 54 Nos. 51 to 53 mixed.
- 55 Gloriosa Perfecta or Rainbow—beautiful markings with rich steel blue shading over the colors. Some with white, others with white and crimson edges.
- 57 Black with crimson and yellow edge—Emperor Frederic.
- 58 Black with crimson and white edge—Freya.
- 59 The two preceding are very beautiful and striking. Both varieties mixed.
- 61 Purple White Edge and Silver Edge, rich purple shades with distinct white border.
- 62 Nos. 55 to 61. Fancy bordered varieties mixed.
- 63 Deep yellow—no yellow flower grown is more attractive than the yellow pansy.
- 64 Pale yellow—delicate canary color.
- 65 Yellow, large center.
- 66 Sunshine or Goldelsie. Some pure yellow without other markings, while on a few plants the flowers are penciled with lines of black or brown near the center.
- 67 Yellow blue edge.
- 68 The preceding yellow varieties with No. 73 mixed.
- 69 Blue shaded with brown—interesting colors.
- 70 Veined—marking curious and beautiful.
- 71 Blue with white border.
- 72 The three preceding varieties mixed.

Giant Trimardeau. The flowers of this class average larger than any other.

- 73 " Yellow. Flowers very large, bright yellow, with black or brown velvety centers.
- 74 " Purple.
- 75 " Beaconsfield.
- 76 " Emperor.
- 77 " Blue.
- 78 " Black.
- 79 " White.
- 80 " Brown, bronze center.
- 81 " Auricula, bronzy lilac.
- 82 " Striped.
- 84. Trimardeau mixed. The preceding and other giant varieties mixed.

Any of the preceding varieties or mixtures from No. 1 to No. 84, inclusive, 10c. per pkt.

85 Extra choice mixed. This is my premium collection mixed.

86 Selected mixed. selected from plants typical of their respective classes.

87 Hesperian pansies. A selection of the most beautiful varieties noticeable for large size and perfection of form and coloring intended for those who wish to grow a few of the very best; in pkg. and trade pkg. only; pkg., 25c.; trade pkg., 50c.; 3 trade pkts., \$1.00.

Extra choice mixed pkt., 10c., trade pkt., 20c.; $\frac{1}{8}$ oz., 50c.; $\frac{1}{4}$ oz., 75c.; 1 oz., \$2.75.

Selected mixed pkts.; 15c.; trade pkts., 30c.; $\frac{1}{8}$ oz., 70c.; $\frac{1}{4}$ oz., \$1.20; 1 oz., \$4.00.

Trade pkts. contain about 1,000 seeds; $\frac{1}{2}$ oz. at oz. rates.

Premiums; For 50c. order pkts. to value of 60c.

For \$1.00 order pkts. to amount of \$1.25; for \$2.00 order to amount of \$2.60.

The above premium applies to seeds in pkts., but not to trade pkts.; or seeds by weight.

The same premium is allowed for other seeds as for pansy seeds.

PANSY PLANTS.

My trade in pansy plants is now very extensive with both amateurs and dealers. Orders will be filled promptly as early as spring opens.

Plants sent to all parts of the country, whether by express or mail, have been reported received in splendid order.

The plants when received, whether by express or mail, should be taken to the cellar, or some other cool place, and unpacked at once. The roots should then be sprinkled with water and covered with fresh soil, planting them out in the evening or early in the morning. The bed should have been prepared some time previously, the surface being stirred frequently. The plants, with watering and shading may then be safely planted even in dry weather.

Plants delivered at express office here well packed to go long distances.

In bud or blossom, from selected seed, 50 plants, \$1.00; 100 plants, \$1.60; 1,000 plants, \$15.60; 500 plants at 1,000 plant rates. Plants once transplanted, by mail postpaid, 25 cents per dozen. Pansy plants for the south ready after September 1st, from seed-bed or once transplanted, by mail, postpaid, \$1.60 per hundred. Larger plants by express in full at same prices, not prepaid.

Not less than one dozen plants by mail.

The above prices are for mixed varieties, but if many plants of any one variety are ordered, ten per cent. will be added to the regular prices of such plants.

There is an advantage in club orders if sent to one person, not only by lower rates for plants, but also through proportionately less express charges if all are consigned to one person. Express rates on plants are lower than general rates.

In club orders each person's collection will be marked separately, and some extras sent to the person making up the order.

For list of other plants see end of catalogue.

Other Flower Seeds.

ASTERS.

The same directions given for care of pansies in seed-bed will apply to asters, except that the latter may be covered a little deeper. Seeds may be sown from the time frost leaves the ground until late in May. Plants started in May will be ready for the fall fairs. Make the soil into which they are transplanted rich, stir the surface frequently and much before they begin to bud.

Asters, when in bloom, should not suffer for want of water. They are fine, grown in pots for decorative purposes. When the plants are in full bloom out of doors they may be lifted with some soil about the roots and placed in a bowl or tumbler of water with a little moss in the bottom. They will thus keep in condition longer if removed to the house for decoration than they would if exposed to the weather in the garden.

With so much need for white flowers none are more useful than white asters. These, with the lighter shades of purple, blue and rose or pink, are very much used for decorative work. A choice selection of these colors, in the best varieties has been chosen for customers.

105	Pæonia Flowered Perfection. Flowers large, globular, free blooming, and in great variety of shades.....	\$0.10
106	Pæonia Flowered white.....	10
107	Pæonia Flowered, pink.....	10
108	Pæonia Flowered, dark purple.....	10
109	Rose Aster. Flowers medium large, in great variety of colors, very double and free blooming, durable and satisfactory for decorative purposes.....	10
110	Rose Aster, white.....	10
111	Rose Aster, light carmine.....	10
112	Rose Aster, light violet.....	10
113	Rose Aster, scarlet, the brightest colored aster; very showy..	10
114	Washington, Aster of the Rose and Victoria class, having probably the largest flowers of any aster, mixed colors.....	10
115	Washington Aster, white.....	10
116	New Branching Aster. Flowers large, of fine form, with long stems; superior to all other asters for bouquets. Mixed....	10
117	New Branching, white, pink, or lavender blue, separate.....	10
118	Tall varieties mixed.	10

HALF-TALL VARIETIES.

119	Comet. A new variety attracting much attention because of resemblance to Japanese Chrysanthemums, colors mixed, shades of bright pink, light rose, lilac and white striped... ..	10
120	Comet, white.....	10
121	Queen of Earlies. Flowers medium to large size on long stems very early and desirable. Mixed colors.....	10
122	Queen of Earlies. White, pink, light blue or crimson, separate each.....	10
123	Diamond. The flowers of this variety are the largest of the pompon class, very regular in form, rivaling the dahlia in symmetry, mixed colors.....	10
124	Diamond, white.....	10
125	Diamond, light blue.....	10
126	Diamond, rose color.....	10
127	Half Tall Perfection. Mixed.....	10
128	Half Tall Perfection. In white, pink or blue separate.....	10
129	Victoria. Flowers of good size and variety, free blooming and desirable, mixed colors.....	10
130	Victoria, white.....	10

131	Mignon. Pure white, a new variety with soft petals, very free blooming and desirable to fill in designs or other decoration work.....	\$0.10
132	Comet, white.....	10
133	Half-tall varieties, mixed.....	10

DWARF VARIETIES.

137	Dwarf Chrysanthemum, Flowered. Plants dwarf, branching free blooming.....	10
139	Shakespeare. Plants low growing, branching and covered with very small double flowers.....	10
140	Pæonia Flowered Dwarf Bouquet. More erect in style of growth than preceding dwarf varieties. Plants one mass of flowers, almost completely hiding the foliage.....	10
143	Dwarf Queen mixed.....	10
144	Dwarf varieties, mixed.....	10

OTHER MIXTURES.

To accommodate the large demand for asters for decorative work we offer for florists' use a mixture of best white with light blue and pink, or carmine shades as:

146	Florists mixed.....	10
	And for the same uses we offer a mixture of the best white varieties.....	
147	Mixed Whites.....	10
148	Trade pkg. containing triple quantity a double price, of the following numbers.....116, 136, 144, 145, 146, 147	

AGERATUM.

Plants susceptible to frost but otherwise easily grown. Flowers in clusters. Free and continuous bloomers.

The dwarf varieties are fine for house plants.

155	Imperial Dwarf White.....	\$0.05
156	Imperial Dwarf Blue.....	05

ALYSSUM.

Flowers white, small, numerous and sweet scented, valuable for ribbon beds or where masses of white are wanted; blooms early and late.

160	Common, best for cutting.....	\$0.05
161	Dwarf, best for edgings.....	05

ANTIRRHINUM.

165	Or Snap Dragon—Dwarf, easily grown from seeds and very desirable for bouquets or in the garden; mixed colors.....	05
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COREOPSIS.

169	Drummond's golden wave, clear, bright yellow.....	05
171	Dwarf varieties mixed.....	05
172	Coreopsis Coronata, larger than golden wave, stems long; fine for cutting.....	10

DIANTHUS.

Free and continuous bloomers from pure white, through rose, carmine, crimson and brightest red, to almost black; the Japan Pinks commend themselves to every one.

180	Chinensis Heddewiggi—Double mixed colors.....	\$0.10
182	Lacinintus—Double fringed, mixed.....	10
184	Diadematus—Diadem Pink.....	10
185	The preceding varieties mixed.....	10
187	Marguerite Carnations. These if sown early will bloom the same season. They are very free bloomers and more than three-fourths come double from seed, being in as great variety of colors and fragrant as the common carnations. Pkt. 10c; trade pkt. 20c.	

GAILARDIA, OR BLANKET FLOWER.

- 190 *Gaillardia Lorenziana*. Double mixed, splendid plants for bedding or bouquets, easily grown, flowers large and continuous bloomers, until late in autumn. Colors, yellow, claret, maroon, brown, crimson and yellow, etc \$0.05

IPOMEA.

- 195 *Ipomea Purpurea*, Morning Glory, 10 colors mixed..... \$0.05
 196 Japanese Morning Glory 05

LARKSPUR.

The flowers of both annual and perennial varieties are fine for cutting and showy in the garden; perfectly hardy and of easy culture. The perennial varieties will bloom the first season and for many years after. There is no blue flower brighter than are some of the Chinese Larkspur.
 201 Chinese perennial, white or bright blue; either color separate, \$0.05
 202 Chinese in many shades of white, blue, purple mixed 05

SWEET PEAS.

The following list of sweet peas is a selection of the best free blooming varieties:

- 206 Emily Henderson, large, pure white. \$0.05
 207 Blanche Burpee, of the choicest whites..... 10
 208 Blushing Beauty, delicate pink. 05
 209 Mrs. Gladstone, rosy pink, blush wings..... 10
 210 Firefly, glowing scarlet 05
 211 Mars, bright crimson..... 10
 212 Butterfly, white-edged lavender..... 05
 213 Monarch, crimson, maroon wings, purple..... 05
 213 Blanche Ferry, pink and white early..... 05
 215 Mrs. Joseph Chamberlain, white stripe, pink..... 10
 216 Captain of Blues 05
 217 Lottie Ecford, white-edge, blue..... 05
 218 Finest varieties mixed, oz. 10c.; pkt. 5c.

NASTURTIUMS, DWARF.

- 223 Lady Bird, yellow, spotted scarlet..... \$0.05
 224 Pupureum, crimson..... 05
 225 Pearl, creamy white..... 05
 226 Rose..... 05
 227 King of Tom Thumbs, scarlet..... 05
 228 Golden King, bright yellow..... 05
 229 Dwarf varieties, mixed..... 05

NASTURTIUMS, TALL.

- 230 Crimson..... \$0.05
 231 Yellow..... 05
 232 Rose..... 05
 233 Scarlet 05
 234 Orange..... 05
 235 King Theodore, very dark red..... 05
 236 Many tall varieties mixed..... 05

PETUNIA HYBRIDA, GRANDIFLORA.

This class of flowers is so well known that they need no special description. Seeds should be sown in boxes sprinkled on the surface of the soil and pressed in. They should be carefully watered and shaded with a pane of glass, muslin or paper, or they may be covered with a woollen cloth laid directly on them, the watering being allowed to soak through the covering. As soon as the seeds have sprouted, remove the cloth, but

do not let the plants dry out or keep them so close as to cause damping off. The fringed petunias are very attractive and are admired even by those who have not cared for petunias until seeing these beautiful varieties. Some flowers of the Superbissima class were five inches across in various colors, with black, white and yellow throats and frilled edges.

241	Fringed Alba, white.....	\$0.15
242	Fringed Maculata, or spotted.....	15
244	Fringed Kermesina, rich crimson maroon.....	15
245	Fringed Mixed.....	15
247	Superbissima Alba, white, 100 seeds.....	15
252	Superbissima, mixed.....	15
253	Fringed and Superbissima mixed.....	15
254	Double Fringed mixed.....	20

PHOLX DRUMMONDII.

One of the most showy and free blooming annuals. Seeds may be sown early with about the same care as for Asters, but like Petunias, the soil need not be so rich.

The Grandiflora varieties are strong growing with large flowers.

The Hortensifloras are compact, bushy growers, with flowers larger than the common varieties.

260	All colors mixed.....	\$0.05
261	Meteor, bright scarlet.....	05
262	White.....	05
263	Hortensiflora, white.....	05
264	Hortensiflora, rose.....	05
265	Hortensiflora, mixed.....	05
266	Grandiflora, mixed.....	05
267	Grandiflora, white.....	05
268	Grandiflora, Splendens, bright crimson with white center....	10
269	Star of Quedlinburg, each petal has a long point in variety of colors and very pretty.....	05
270	Fringed. These have fringed edges, mixed colors.....	05
271	Star and Fringed, mixed.....	05

RESEDA ODORATA OR MIGNONETTE.

For fragrance and free blooming qualities the three following varieties are offered as the best:

272	Parson's white.....	\$0.05
273	Miles Spiral, long spikes.....	05
274	Matchet, dense compact growth.....	10
275	Mixed varieties.....	05

STOCKS.

For fragrance and beauty combined, the ten weeks stocks are much esteemed. They should be started early in window or hot bed, but they will bloom in good season if sown as recommended for pansies. A light, rich soil suits them best. Stocks, Alyssum and other plants belonging to the cabbage family suffer from attacks of the flea beetle. The plants should be dusted with a mixture of one part pyrethrum powder to forty parts land plaster. Coal ashes or dry road dust may be substituted for plaster. The Californian grown pyrethrum called Buhach is the best.

276	Large flowered, tall, ten weeks, mixed.....	\$0.10
277	Large flowered, dwarf, pyramidal, ten weeks, mixed.....	10
278	Perpetual flowering, white.....	10

VERBENA HYBRIDA.

Seedling Verbenas are more free blooming and fragrant than those from cuttings, and if seeds are sown in the house, may be had in bloom as early as desirable for our season. They come reasonably true to color from seeds.

284	Mammoth mixed.....	\$0.10
285	Grandiflora Auricula, flowered, mixed colors, with white eye	10
290	Candidissima, pure white.....	10
291	Defiance, brilliant scarlet	10
292	Deep Blue, with white eye.....	10
293	Scarlet, with white eye.....	10

Plant Department.

The selection of varieties for our plant list has been made with reference to their fitness for outdoor growing, window boxes in summer, veranda boxes, and vases without regard to their usefulness as winter house-plants also. We find that many things which formerly were classed only as greenhouse plants are fine for summer growth, either outside of the window, in the garden, or as climbers by the porch. For a summer climber there is nothing finer than *Cobea Scandens*.

SEEDLING PLANTS IN VARIETY.

In this department we seem to supply a long felt want, and have been surprised at the great demand for seedling plants for bedding purposes. Many do not care to trouble with seed sowing, others order a few to fill vacancies, or of such varieties as they cannot start early.

These plants are all much earlier than can be started out of doors. We have increased our facilities for growing and hardening off the plants, and our large mail and express trade is steadily increasing.

Seedling *Verbenas* are healthier, more fragrant and free blooming than those from cuttings. Prices as follows:

Asters, in white, pink, light blue, bright red, deep purple, each color separate or in any variety in mixture as listed among such seed, per doz.	\$0.15
Chinese Larkspur, hardy perennial, blooming the first season, white, blue or mixed, per doz.	15
<i>Chrysanthemum Inodorum</i> , a hardy perennial, blooming the first season with feathery foliage and double white flowers after style of double feverfew but more graceful, a few plants come single or semi-double, per doz.	25
Ten Weeks stocks, white, crimson or mixed, per doz.	25
<i>Petunia</i> , fringed or superbissima, or both varieties mixed, per doz. .	25
<i>Petunia</i> , double from seed, not more than 20 per cent. come double, per doz.	25
<i>Salvia Splendens</i> , 5c each, per doz.	50
<i>Cobea Scandens</i> , a rapid growing hardy climber, with large showy flowers, blue, 5c each, per doz.	50
<i>Verbenas</i> , in separate colors or varieties, only as described in seed list, per doz.	25
English Daisies, white or pink, per doz.	25
Marguerite Carnations. This new class of carnations has proved very satisfactory, blooming as they do the first season from seed, they are more thrifty and free than the old style florists' carnations and equally fragrant. A large percentage come double and some of the most choice can be potted for blooming in the house, per doz.	30
<i>Browallia Gigantea</i> , much larger flowers than the common kind. Blue with white center.	30

Plants from Cuttings.

These are necessarily dearer than plants from seed because much room is taken up in the greenhouse with stock plants of the varieties to be propagated, but if we would be sure of varieties many kinds must be increased in this way.

	Each.	Doz.
Double Alyssum, new giant. This is a stronger grower than the old kind and better for cutting purposes; graceful drooping plants.....	5c.	50c.
Feverfew, double white.....	5c.	50c.
Forget-Me-Not, <i>Heavenly blue</i> ; perfectly hardy in winter but easily lost in summer if neglected.....	5c.	50c.
Pineapple Salvia— <i>Salvia rutilans</i> . The leaves of this salvia have a strong pineapple fragrance. Plants may be grown in pots, or potted in late summer for winter blooming. The long spikes of crimson flowers are very showy.....	5c.	50c.
Paris Daisy—White with yellow center, a new large flowered variety more free blooming than the old kind.	5c.	50c.
Paris Daisy—Golden Beauty Equal to the white in size and freedom of bloom; a clear pure yellow. New.....	5c.	50c.
Double Petunias—Sea Foam. Fringed pure white. The best double white petunia.		
White Bouquet—Very profuse bloomer not fringed.		
Mrs. F. Sander—Pure pink, heavily fringed and very double.		
Pink Beauty—Finely fringed, a favorite.		
Manila—Fringed white, purple and carmine.		
Merrimac—White veined lilac and purple fringed.		
Helen Gould—very double fringed, white with carmine and purple center.		
Santiago—Slightly fringed, violet, crimson, edged white.		
Stella—Carmine with white border.		
Champion—Deeply fringed, rich plum purple.		
Ada—Fringed mottled carmine and white.		
Each 10c.; three for 25c.		

Heliotrope—We have tested many varieties the past season and find some of the older varieties the most free bloomers, but some of the new kinds have special qualities to recommend them. Some kinds are different only in name, and so were rejected. We offer the following as the best: Queen of Violets, very dark with white eye; Florence Nightingale and Jersey Beauty, medium shade and very free bloomers; White Lady, nearest approach to white, good grower, free bloomer; Albert Deleaux, variegated foliage, medium color of flowers; Picciola, tall strong grower with good sized trusses of flowers, more nearly red than any other variety, 10c. each; three for 25c.

Geranium Rose Scented are fine for summer use if grown in the garden, and like Heliotrope should be in every outdoor collection. Either Skeleton leaved or common; 10c. each; three for 25c.

Lemon-scented, rare and delightfully fragrant, 10c. each; three for 25c.

Mexican Primrose. These plants bloom profusely in the summer and are fine for window boxes or in the garden; 5c. each; doz. 50c.

Solanum Jasminoides. A beautiful summer climber for the porch or in window boxes; 5c. each; doz. 50c.

Cuphea Platycentia—*Cigar Flower*. Always in bloom winter or summer and pretty in a window box collection; 5c. each; doz. 50c.

Lantana—Jaques Minot, purple, crimson and yellow; M. Claveau, red

and yellow; Aurora, orange and yellow; Franciene, red and yellow; Perfection, variegated leaves; Rosea, a pink trailer; Javoi, white; 10c each: 3 for 25c.; 7 for 50c.

Poet's Ivy. This form of English ivy has smaller leaves than the common variety and is very pretty and graceful; 10c. each; three for 25c.

Hanging Basket Fern—*Nephrolepis Exaltata*. We have had wonderful success with this fern grown in a hanging basket built of sticks, log cabin fashion, and lined with sphagnum moss or anything to keep the soil from sifting through. Young plants from the old one grow through the sides, and the fronds three to four feet long on large plants are always admired. Leaf mould, with a little well rotted manure, suits them best. Our common white cedar fence posts are easily cut and split into suitable pieces for building plant baskets.

Ours is the drooping variety with long, arching, drooping fronds. Plants, 15c. each; small plants, 10c.; large plants, 20c.

Boston Fern. This is a more robust variety of *Nephrolepis Exaltata* and has become very popular, good thrifty plants in different sizes, 15c., 20c. and 25c. each.

Asparagus Plumosa. Sometimes called the Feather Fern. A favorite with everyone, 15c., 20c. and 25c. each.

Asparagus Sprengeri. Emerald Feather. Makes fine specimen plants for window in winter; 15c., 20c. and 25c. each.

Umbrella Plant—*Cyperus Alternifolius*. These favorite plants are easily grown in pots, as aquatics, or in the garden; they like plenty of moisture; thrifty young plants 5c. each; larger plants 10c.

Strawberry Geranium—*Saxifraga sarmentosa*—easily grown and a beautiful basket plant; 5c. each; six for 25c.

Geraniums. We have in stock thirty-two of the best varieties, mostly double, including the following:

Double Whites Bride Bouquet, Alpine Beauty, Ayne Chevalier, La Favorite, Bruant, bright scarlet; Mabel, brilliant dark scarlet; John Doyle, bright vermilion; S. A. Nutt, very dark vermilion; Professor Poirant, crimson, purple and scarlet.

Of pinks, Salmon's flesh color, apple bloom, etc., we have Beauty of Pottvine, Queen of Faries, Madam Gilbert, and others. Also choice single varieties. 10c. each; 3 for 25c.; 13 for \$1.

Rudbeckia. Golden Glow. Double yellow. Perfectly hardy perennial; each 10c.; three for 25c.

Helianthus Multiflora. Double perennial Sunflower, very free and continuous flowers; 10c. each, three for 25c.

Achilea. The Pearl double white very hardy and profuse bloomer; 5c. each; doz. 50c.

GLADIOLUS BULBS.

We have a fine collection of gladiolus in splendid mixture of shades. Per 12, 40c., per 35, \$1.00. Postage paid. By express 30c. per doz., 45 for \$1.00.

GENERAL REMARKS.

Read what is said about care of pansy plants when received by mail or express. The same remarks apply to other plants also.

Express rates on plants are now so reasonable it is much better to have plants come that way than by mail. Larger plants can be sent by express, and we can afford to be more generous with extras on express orders. *We do not fill plant orders of less than 25c. by mail.* A dozen may consist of more than one kind of plant at same price. In club orders each one's lot is marked separate and liberal extras given to the one making up the club.

Of miscellaneous plants at dozen rates, select for each dollar to value \$1.10; of 10c. plants, select 13 for \$1.00 or 28 for \$2.00.

We warrant to fill all orders received. If seeds or plants fail to reach you in due season, let us know at once. Money at our risk if you send express order, post office order or bank draft on Chicago, Milwaukee, St. Paul or Minneapolis banks, or any of the large cities. Please do not send your personal checks. Banks refuse them. Small amounts in silver have so far proved safe. Stamps if sent should not be of larger than two cent denomination, one cent stamps preferred. Letters containing bank-bills should be registered. Express orders preferred. Make orders plain and separate from correspondence.

And don't forget to sign your name. Send all orders to

WILLIAM TOOLE,

Pansy Specialist,

1901.

BARABOO, WIS.

Special Mail Plant Department.

Our customers often inquire for roses, etc. We have made arrangements to have these grown for us and sent to our customers direct from the growers. Anything ordered from the following list will reach our customers by mail, postage paid, and separate from other plants.

We have tried some of these for our own planting and are well pleased. This is a good way to be supplied with roses and shrubs at small cost, as they will at the end of one season's growing be much better than are often received by express at much greater cost. Orders will be filled in Spring as soon as danger of freezing in transit is over. Clematis and shrubs must be sent before they have made much growth, not much later than middle of April. Please do not order less than 25 cents' worth as it costs something for packing and postage no matter how small the order.

HYBRID PERPETUAL ROSES.

The following list includes the very best in this hardy, free-blooming class of roses, and they will give a splendid lot of flowers if properly cared for after they have become established.

Alfred Colomb—bright carmine crimson, large free bloomer.

American Beauty—deep pink; fragrant continuous bloomer.

Annie Diesbach—bright shell pink, very double-vigorous.

Baron Bonstettin—rich dark red, shading to maroon, large and very beautiful.

Caroline Sansel—clear bright rose color, large and free flowering.

Caprice—satin pink, striped with white and carmine buds, are especially handsome.

Charles Lefebore—reddish crimson, shaded with purple, full and glossy; a splendid rose.

Coquette Alps—white with pink center; a continuous bloomer, fragrant and of good size.

Coquette Blanches—white with creamy center, as free blooming and good as the preceding.

Duc Rohan—vermilion; a good old favorite.

Fisher Holmes—rich crimson scarlet, after style of Gen. Jaqueminot but more double and free blooming.

General Jaqueminot—crimson scarlet, especially fine in bud, a well known old favorite.

General Washington—soft, glossy scarlet flowers, large, broad and very double; blooming freely in the fall.

John Hopper. Flowers large and full, a very free bloomer; bright pink, shaded with crimson.

John Keynes—deep reddish maroon; strong grower, free bloomer.

Jules Margottin—bright carmine; free flowering, strong grower, very hardy.

La Reine—clear, bright rose; large, very double, hardy and free flowering.

Madame Chas. Wood—Bright fiery scarlet shaded with maroon, large, one of the best.

Mme. Gabriel Luizet—One of the most beautiful of roses; very double, large clear coral rose, shaded with pearly lavender.

Mme. Georges Bruant—(*Hybrid Rugosa*)—A hardy ever bloomer; flowers semi-double pure white buds, pointed in clusters.

Mme. Plantier—This is not a perpetual although generally so classed; flowers white and in profusion.

Magna Charta—One of the hardiest and best, a profuse bloomer, clear, rosy red, flushed with crimson.

Marshall P. Wilder—A good grower and very desirable; bright scarlet crimson shaded with maroon.

Mrs. Cleveland—Waxy flesh pink, flowers freely produced.

Mrs. John Laing—Extra hardy; flowers large, full and double on long stems; clear, bright, shining pink.

Oakmont—Deep, bright rose, after style of Paul Neyron, but blooms more freely in late summer.

Paul Neyron—Probably the largest of any rose; very double and fragrant; bright, shining pink.

Pride of Waltham—Flowers delicate flesh, shaded with bright rose, clear and distinct, a fine sort.

Prince Camille Rohan—Flowers large, handsome, fragrant and freely produced; color deep velvety crimson, shaded with maroon and almost black; one of the handsomest.

Ulrich Brunner—Brilliant cherry red, attractive, vigorous and hardy.

Victor Verdier—Bright rose with carmine center, a pleasing shade; growth strong with but few thorns. Price of the foregoing roses, 12c. each; 3 for 30c.; 11 for \$1.00.

SPECIAL NEW VARIETIES OF HYBRID PERPETUALS.

Helen Keller—Color brilliant, rosy cerise, differing from any other variety; flowers large, full and fragrant; plants vigorous and very free bloomers, flowering early and late.

Clio—Flesh color, one of the finest roses grown and will become very popular; very vigorous and free blooming; flowers large and of good substance.

Marchioness of Lorne—Large full flowers, long pointed buds; color, shining rose shaded with carmine; hardy, free and continuous blooming and good in every way.

Margaret Dickson—A hardy, vigorous grower, free and constant bloomer; flowers large, waxy white with pearly luster; buds large and handsome, well set off with glossy foliage which makes a handsome bush even when not in bloom.

Mrs. Sherman Crawford—Flowers large, profuse and constant; color, deep rosy pink, shaded with flesh, very fragrant and desirable. 15c. each, 3 for 40; the collection of 5 for 60c.

EVERBLOOMING ROSES—TEAS AND HYBRID TEAS.

Varieties marked * are hardier than others.

*Aggripina—Deep crimson; an old favorite.

*Augustine Guinoiseau (White La France)—Good in doors or out, one of the best six. Identical with La France, except in color, being nearly white sometimes tinted with fawn.

Bon Silene—Another of the very best, an old variety and always a favorite; buds very large and beautiful; color deep rose, sometimes rosy crimson; truly everblooming.

Bride—The favorite white forcing rose.

Bridesmaid—Clear pink; does well in open ground and good for forcing.

*Burbank—Hardy for this class of roses; a selection from seventy-five thousand seedlings. The deepest and brightest pink rose in cultivation. Good for outdoor or pot culture; blooms early and late. 15c. each, 3 for 40c.

Clothilde Soupert—Color white shaded, with blush in center. A profuse bloomer and favorite bedding rose or for pot culture.

Catherine Mermet—Clear shining pink, large flowers, good bloomer.

*Caroline Marniesse—Hardy of its kind and one of the most constant bloomers. White, slightly tinted with pink.

*Duchess of Albany—Red La France—An abundant and constant bloomer; large, very double and fragrant.

Etoile d'Lyon—A magnificent yellow rose, one of the best of any color.

Hermosa—An old favorite, clear rose, constant bloomer.

Kaisern Augusta Victoria—A lovely white, elegant in bud or bloom; perfume rich, growth vigorous. The best of all white everbloomers for outdoor culture.

*La France—An old favorite, called the queen of roses; silvery satin rose, a profuse bloomer.

*Mrs. De Graw—Unusually hardy, good for garden or cemetery; vigorous grower and profuse bloomer; rich glossy pink.

*Mad' Hoste—Very popular, Canary yellow, deepening to golden center.

Marion Dingee—Strong grower with long flower; stems brilliant crimson.

Marie Guilot—Queen of whites; pure white with beautiful buds.

Meteor—Rich velvety crimson.

*Mosella—Yellow Soupert—As hardy as Clothilde Soupert and equally as free a bloomer; large clusters of white flowers on yellow ground.

Pink Soupert—Rich, dark shining pink, and as free to bloom as the other Souperts.

Papa Gontier—One of the best for bedding out, crimson shade, silky velvet texture with long stems.

Pearl of the Garden—The old standby, yellow tea rose, always in demand.

Princess Bonnie—The richest deepest crimson, of easy culture.

*Parquette—A pure white polyantha, a good winter bloomer, Flowers small, in clusters.

*Safrano—A fine old variety, apricot yellow shaded with fawn.

Sunset—Another old favorite, Golden amber shaded with crimson. Price of everblooming roses each 10c., any three for 28c., six for 50c.

ROSA WICHURIANA AND ITS HYBRIDS.

Wichuriana—Memorial Rose. Trailing, good to cover banks and rockeries, flowers large, single, white.

Pink Roamer—Flowers single in clusters, rich pink, very fragrant, luxurious grower.

Perfection—Flowers double, soft pink tipped with white.

Favorite—Foliage dense, flowers double, rose color, very fragrant.

Mandas' Triumph—A gem, flowers in clusters double. Pure white, 12c. each, 2 for 20c., 5 for 45c.

NEW HYBRID WICHURIANA ROSE.

Jersey Beauty—Flowers single and large, pale yellow in great profusion.

Evergreen Gem—Flowers double yellow and buff large.

Gardenia—Flowers bright yellow, with long stems; 16c. each, 2 for 30c.

Dorothy Perkins—The newest Memorial Rose. Flowers very double borne in clusters, pointed buds clear shellpink vigorous and hardy; 20c. each, 3 for 50c.

One each of the four new Wichuriana roses for 60c.

THE RAMBLER ROSES.

Crimson Rambler. Fine as a pot plant for winter forcing. Pink Rambler, Euphrosyne, Thalia White Rambler, Aglaia, Yellow Rambler; 12c. each, 3 for 30c.

Helene—A new hardy Rambler, color, violet rose, buds carmine, finely mossed, will become popular; 16c. each, 3 for 40c.

Moss Roses—Blanche Moreau, white, Crimson Globe, Deep Crimson, Princess Adelaide, Pink; Moss Roses 15c. each, 3 for 40c.

Climbing Roses—Baltimore Belle, pale blush flushed with carmine, Seven Sisters of various shades from white to crimson, Queen of Prairies clear pink, Russels Cottage, dark crimson; price 12c. each, 3 for 30c.

Honeysuckles Climbing—Halls Japan, white, Monthly Fragrant, red and yellow, Scarlet Trumpet vigorous and hardy; 12c. each, 3 for 30c.

Boston Ivy; 12c. each, 3 for 30c., 12 for \$1.

Clematis—These popular climbers need no description, they are so well known. Jackmani, the best known and very popular, flowers violet purple in great profusion. Henryi, a vigorous grower and free bloomer, with large, white flowers. Duchess of Edinburg, flowers double, white, fragrant. Mme. Veillard, satiny lavender pink. Mme. Edward Andre, the nearest approach to bright red, large and in profusion. Ramona, lavender blue flowers, very large. Paniculata, one of the most valuable hardy climbers; flowers small, white and in great profusion, very fragrant and a vigorous grower. Clematis 15c. each; any 3 for 35c. One each of the seven for 75c.

Wistaria—Chinese Purple, 12c. each; 3 for 30c.

Hydrangea paniculata—The hardy Hydrangea; each 10c.; 3 for 25c.

Tartarian Honeysuckles—Red and white, 10c. each; 3 for 25c.

Spirea prunifolia—Double white flowers. Spirea Reevesii, single white. Spirea Anthony Waterer—new—bright crimson, profuse bloomer all summer and fall. Blue Spirea a rich lavender blue, very free bloomer. Each 15c.; 3 for 40c.

Mock Orange—Philadelphus—Double white, fragrant. Garland, very profuse, single and fragrant. Golden, with bright yellow foliage. Each 12c.; 3 for 30c.

Weigelia—Handsome for the lawn. Candida, pure white. Floribunda, dark crimson. Rosea, large, rose colored. Each 12c.; 3 for 30c.

Snowball—Common—Viburnum Opulis. Snowball, Japan—Viburnum plicatum. 12c. each; 3 for 35c.

Asparagus Plumosa—also called Asparagus Fern; very popular for house culture. Asparagus Sprengeri, The Emerald Feather, about as popular as the preceding, can be grown into fine specimen plants, either kind is good to cut for mixing with flowers. Each 15c.; 3 for 40c.

Japan Cedar—Cryptomeria Japonica—an evergreen suitable for growing with palms and kindred plants. Each 20c.; 3 for 50c.

The Wisconsin Horticulturist

Devoted to the Horticultural Interests
of Wisconsin and adjacent states

Issued monthly under the management of the Wisconsin
State Horticultural Society

MRS. FRANKLIN JOHNSON, Editor
Baraboo, Wis.

Subscription Price, 50 cents per Annum

We offer it to our customers at the club rate of 30 cents per annum.—
WILLIAM TOOLE, Baraboo, Wis.

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